

# Fixing the Flush: A Household Impact Study

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## The Problem: Non-Degradable Items

Despite public messaging, many households continue to flush non-degradable items, believing them to be safe for sewer systems. These materials do not break down quickly enough, accumulate in pipes and treatment equipment, and require costly manual removal. This increases the risk of city-wide blockages and maintenance bills.

In 2024, the King County Wastewater Treatment Division spent approximately **\$150,000** to remove improperly flushed items. This report explores the environmental and financial impact of improper flushing habits and proposes a sustainable household solution: bidet adoption.

⚠ Local agencies like Sammamish Plateau Water encourage residents to dispose of wipes and hygiene products in lidded trash bins, but widespread behavioral change remains limited.



# Household Case Study: Pre-Intervention

Before intervention, our family used approximately 3 packs of “flushable” wipes per month, each containing 56 wipes. This amounted to a significant annual quantity and weight of waste.



These wipes were flushed directly into our toilet, contributing to potential sewer blockages and environmental strain.

## Financial Analysis: Pre-Intervention Costs

The use of "flushable" wipes incurred direct annual costs and posed a risk of expensive plumbing repairs.

Item	Quantity/Cost
Wipes per year	~4 boxes (10 packs/box)
Cost per box	~\$18
Annual cost of wipes	~\$72
Potential clog repair cost	\$100–\$400 per incident

These costs highlight the financial burden associated with improper flushing habits.

# Household Case Study: Post-Intervention

After learning about the impact of wipes on sewer systems, we installed bidets in each bathroom, leading to significant changes in our household waste.



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## Bidet Cost

~\$300 per unit

2

## Estimated Lifespan

5–10 years

3

## Annualized Cost

<\$50

4

## Wipes Eliminated

3,600/year

## Environmental Impact: Post-Intervention Benefits

By switching to bidets, our household has significantly reduced its environmental footprint and alleviated strain on city infrastructure.

- Prevents ~5.2 kg of waste from entering sewer systems annually.
- Eliminates repeated exposure of city infrastructure to clog risks.
- Reduces additional labor and energy required for waste removal.

# Comparative Analysis: Wipes vs. Bidets

A direct comparison highlights the advantages of bidet adoption in terms of cost, clog risk, maintenance, and environmental impact.


Category	Wipes + Toilet Paper	Bidets
Annual Cost	\$72–\$200	<\$50 per year
Clog Risk	High	Low
Maintenance Cost to Cities	High	Low
Environmental Impact	Moderate to High	Low

## Broader Implications: Community Impact

The positive effects of bidet adoption extend beyond individual households, offering significant benefits for the wider community and municipal services.


### Waste Diversion

Thousands of kilograms of waste could be diverted from sewer systems.



### Cost Reduction

Municipal maintenance costs could be significantly reduced.



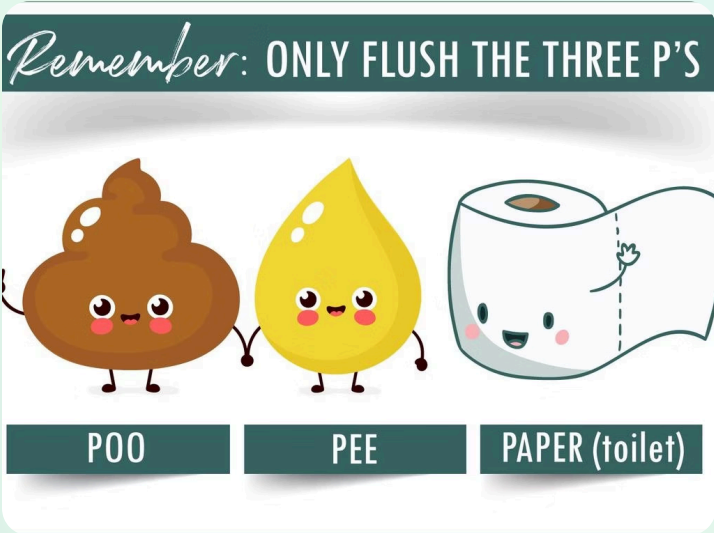
### Awareness Increase

Public awareness of sustainable sanitation could increase.

If even 10% of households in King County adopted bidets, the collective impact would be substantial.

## Here is what you can do:

- Only Flush the 3 Ps: Pee, Poop, and (Toilet) Paper
- Ditch the Wipes, Switch to a Bidet
- Spread the Word- Talk to family, friends and neighbors about the hidden costs of flushing wipes
- Advocate for clearer product labeling and public education







# Wipes-NOPE-not flushable!

Here's an example of what can happen if you keep flushing wipes down the toilet. Clogs like these cost our wastewater treatment division thousands of dollars to fix!